

S/N 09/800,413



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Hacker et al.	Examiner:	M.O. Savage
Serial No.:	09/800,413	Group Art Unit:	1723
Filed:	03/06/2001	Docket No.:	758.924US01
Title:	LIQUID FILTER HAVING INTERCHANGEABLE SPIN-ON CANISTER FILTER AND FILTER CARTRIDGE; AND METHODS		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 30, 2004.

By: 
Name: Sharon Trent

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Brief is being filed pursuant to 37 C.F.R. § 1.193 to reply to the Examiner's Answer mailed March 1, 2004. Applicants request that the rejection of claims 19, 20, 21, and 24 be reversed.

A. Procedural Observations

1. Related Appeals and Interferences

The Examiner's Answer stated that Applicants' Brief did not contain a statement identifying the related appeals and interferences. Applicants disagree with this statement.

Attention is directed to page 2, Section II of Appellant's Brief on Appeal. Section II is entitled "Related Appeals and Interferences." This section of Appellant's Brief specifically states that there are no related appeals or interferences.

2. Claims Appealed

Appellant notes that the Examiner has entered the Rule 116 Amendment to claim 19. As such, claim 19 no longer uses the language "single piece" before the word "housing." Appellant has attached a revised Appendix 1 that includes a copy of the current form of the claims on appeal.

B. Response to Examiner's Arguments

1. Claim 19 requires that the filter head is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter.

- **The Examiner has presented no evidence of anticipation or obviousness of this limitation.**

The Examiner, for the first time, states, "it is held that the filter head suggested by the prior art would be capable of receiving a spin-on canister filter having an upper end including a threaded connection and first and second seals configured in the same manner as the bowl-cartridge filter suggested by the prior art."

Appellant would like to know what prior art the Examiner is referencing when making this assertion. None of the prior art references, either alone or in combination with each other, disclose or suggest a filter head that is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter.

The Austrian patent relied upon in the rejection only shows one type of filter connected to head piece 1 by way of a bayonet connection. There is no disclosure of using any other type of filter in association with the head piece 1 in the Austrian patent. Further, there is no suggestion in the Austrian patent or in any of the other prior art of record that shows a filter head that is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter.

The Examiner provides no evidence for the assertion that the filter "suggested by the prior art would be capable of receiving a spin-on canister filter." Rather than provide evidence, the Examiner's Answer merely frames this assertion as "it is held." This is not evidence.

The Examiner, for the first time, stated that the alternative language of the claim does not require disclosure of a spin-on canister filter in order for the claim to be rejected in view of applied prior art. The alternative language pointed to by the Examiner is the language, "one of a spin-on canister filter and a bowl-cartridge filter operably connected to said filter head."

The Examiner's response misses the point. The argument here is not about that alternative language; rather, the argument is about the limitation, "said filter head being capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter."

It appears that the Examiner believes this limitation may be ignored. MPEP § 2143 requires that each and every limitation be either disclosed or suggested by the prior art. The Examiner has pointed to no disclosure of a filter head that is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter. The Final Office Action made no reference to this limitation whatsoever. Only in the Examiner's Answer did the Examiner say something about this limitation --and what the Examiner did say was nothing more than a naked assertion.

The rejection of claims 19, 20, 21, and 24 should be reversed for at least this reason alone.

2. Claim 19 requires that the threaded connection has a cross-sectional thickness no greater than 10 mm.

- The Examiner is mistaken on his interpretation of the prior art.**

The Examiner admitted that the Austrian patent does not show a threaded connection. The Examiner admitted that the Austrian patent does not show a threaded connection having a cross-sectional thickness no greater than 10 mm. The Examiner further admitted that the Austrian patent as modified by Mules '987 does not disclose a threaded connection having a cross-sectional thickness of no greater than 10 mm.

Appellant wishes to point out that, of course, the invention lies in the claim as a whole. The limitations related to the threaded connection are part of the particularly preferred and unique configuration that allows the filter head to be capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter. The claimed threaded connection is recited as being between the filter and the outer tube of the filter head. This particular location for the threaded connection (between the filter and the outer tube of the filter head) is shown at, for example, reference numeral 102 in FIGS. 1 and 2; and reference numeral 126 in FIGS. 3 and 4.

The Examiner's evidence of obviousness relates to the disclosure in Gullett '636. In particular, the Examiner points to the connection 22 in Gullett for having a cross-sectional wall thickness of no greater than 10 mm.

As pointed out by Appellant, the connection 22 in Gullett is not between a filter and the outer tube of a filter head as required by the claim; rather, the connection 22 shown in Gullett is between two housing pieces, plate 30 and housing 20. Gullett would have provided no suggestion or motivation to a person of ordinary skill in the art to have modified the Austrian patent (as modified by the Mules patent) at a connection between the outer tube of the filter head and the filter -- because that is not where Gullett shows his threaded connection.

The Examiner states that the part 30 disclosed by Gullett is considered to be "a filter head" because, according to the Examiner, it forms a removable upper portion of a filter housing defining inlet and outlet flow passageways. Appellant disagrees. A plain reading of the Gullett reference states that the part 30 is a top plate, or a top plate assembly. Gullett states that the top plate assembly is mounted on a filter mounting base 80, which is attached to the engine block. Gullett, column 7, lines 29 - 31. In Gullett, the filter head is shown at structure 80. The filter head is a part that is permanently mounted to the engine block.

The Examiner asserts that, "Gullett clearly suggests that the recited cross sectional thickness at the threaded connection is desirable in order to provide the required strength of connection between the cartridge bowl filter and filter head." Appellant disagrees with this assertion. Gullett does not show the recited cross sectional thickness between a filter head and a filter; rather, as explained above, Gullett shows a threaded connection between a filter plate 30

and a filter housing 20. The plate 30 in Gullett is then connected to a filter head (referred to as a filter "base" in the Gullett patent).

3. **Claim 19 requires the filter head to have a center tube, an outer tube, a first liquid flow port, and a second liquid flow port, with the center tube flow passageway extending between and in fluid communication with a center tube end port and the second liquid flow port.**

- **The Austrian patent does not disclose or suggest this detailed arrangement of the filter head.**

The Examiner continues to assert that the structure in the Austrian patent discloses these limitations related to the filter head. The Examiner should not be allowed to interpret the same center tube in the Austrian patent as corresponding to different and separate limitations in the claim. This is not a fair application of § 102.

C. Summary

None of the prior art cited by the Examiner gets to the point of the invention: a single filter head that is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter. The Final Office Action ignored this limitation. The Examiner's Answer asserts the prior art would be capable of receiving both types of filters, but does so without providing any *evidence* for the assertion. The rejection of the claims should be reversed for at least that reason alone.

In addition, the Examiner has not interpreted the Gullett reference correctly. The Examiner refers to a top plate as a filter head, which is in plain contradiction to the Gullett reference.

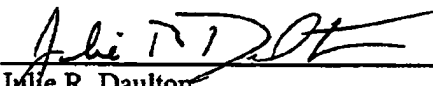
Further, the Examiner has unfairly applied the limitations in claim 19 related to the filter head geometry to the structure shown in the Austrian patent.

Appellant requests the Board to reverse all of the rejections of the claims. The Board is requested to allow the pending claims for at least these reasons.

Please charge any additional fees or credit overpayment to our Deposit Account No. 13-2725.

Respectfully submitted,
MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Date: 30 April 2004


Julie R. Daulton
Reg. No. 36,414
JRD:st



REVISED APPENDIX 1

THE CLAIMS ON APPEAL (as finally amended)

19. A liquid filter assembly comprising:
- (a) a filter head; said filter head having a center tube, an outer tube, a first liquid flow port, and a second liquid flow port; said outer tube circumscribing said center tube;
 - (i) said outer tube defining an end, an outer tube end port at said end, and an outer tube flow passageway extending between and in fluid communication with said first liquid flow port and said outer tube end port;
 - (A) said outer tube further including an outer tube threaded region;
 - (ii) said center tube defining a center tube flow passageway and a center tube end port; said center tube flow passageway extending between and in fluid communication with said center tube end port and said second liquid flow port;
 - (A) said center tube projecting outwardly from said end of said outer tube;
 - (b) one of a spin-on canister filter and a bowl-cartridge filter operably connected to said filter head; said filter head being capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter; said one having a housing defining an interior and a cartridge filter operably oriented within said housing interior; said cartridge filter including a region of filter media and a non-removable inner liner;
 - (i) said filter having a filter threaded region threadably engaged to said outer tube threaded region to define a threaded connection;
 - (A) said threaded connection having a cross-sectional thickness no greater than 10 mm;
 - (ii) said filter being in liquid flow communication with said outer tube end port and said center tube end port;

- (c) a first seal arrangement; said first seal arrangement oriented to form a first seal to inhibit leakage between said outer tube flow passageway and said filter; and
- (d) a second seal arrangement; said second seal arrangement oriented to form a second seal to inhibit leakage between said center tube flow passageway and said filter.

20. A liquid filter assembly according to claim 19 wherein:

- (a) said filter comprises a bowl-cartridge filter;
 - (i) said housing being re-usable; and
 - (ii) said cartridge filter being selectively replaceable within said housing.

21. A liquid filter assembly according to claim 19 wherein:

- (a) said filter threaded region is on an interior portion of said housing; and
- (b) said outer tube threaded region is on an exterior portion of said outer tube.

22. (Withdrawn) A liquid filter assembly according to claim 19 wherein:

- (a) said filter comprises a spin-on canister filter;
 - (i) said housing being single-use; and
 - (ii) said cartridge filter being permanently, and non-replaceably mounted within said housing.

23. (Withdrawn) A liquid filter assembly according to claim 22 wherein:

- (a) said filter threaded region is on a baffle plate; and
- (b) said outer tube threaded region is on an exterior portion of said outer tube.

24. A liquid filter assembly according to claim 19 wherein:

- (a) said cartridge filter includes a cylinder of pleated filter media defining an open filter interior;
 - (i) said center tube extending into said open filter interior.